

REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections contained in the Office Action of May 13, 2009 is respectfully requested.

By this Amendment, claims 57 and 60 have been amended, and claims 9-15, 41-55, 58, 59, 64, 66 and 67 have been cancelled. Thus, claims 23-34, 36, 38-40, 57, 60-63, 68, 69 and 71 are currently pending in the application. No new matter has been added by these amendments.

On pages 2-4 of the Office Action, the Examiner rejected claims 25-26, 28-40, 55, 57-64 and 67-71 under 35 U.S.C. § 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being obvious over Nogami et al. (U.S. 6,693,036). For the reasons discussed below, it is respectfully submitted that the present claims are patentable over Nogami.

The discussion of the invention provided below makes reference to the specification of the present application. However, these references are made only for the Examiner's benefit, and are not intended to limit the claims.

Independent claim 57 is directed to a substrate holder including a flange portion connected to a shaft, a chucking member which can move with respect to the flange portion in an axial direction of the shaft and which holds a substrate, and a first pressure chamber formed between the flange portion and the chucking member, with the first pressure chamber being defined by the flange portion, the chucking member, and an elastic member linking the flange portion and the chucking member. Further, a fluid is supplied to the first pressure chamber to pressurize the first pressure chamber, thereby bringing the substrate held by the chucking member into contact with the processing electrode. As described on page 109, lines 2-10 of the original specification, this structure allows the pressure at which the substrate contacts the processing electrode to be controlled with high precision, and it is therefore possible to control the surface pressure between the substrate and the processing electrode so that it is lower than a pressure at which a semiconductor device can be destroyed, thereby making it possible to process the substrate without destroying the fragile materials.

Independent claim 60 is directed to a substrate holder including a flange portion connected to a shaft, a chucking member which can move with respect to the flange portion in an axial direction of the shaft and which holds the substrate, and a weight of a predetermined weight attached to the chucking member to adjust a pressure applied to the processing electrode by the substrate. As described on page 116, lines 8-12 of the original specification, the surface pressure

applied to the substrate can be adjusted by mounting a weight having an appropriate weight to the chucking member, thereby enabling low-load processing of the substrate.

Amended independent claim 57 recites a substrate holder for holding a substrate and bringing the substrate into contact with a processing electrode to carry out electrolytic processing of the substrate, comprising a flange portion connected to a shaft, a chucking member which can move with respect to the flange portion in an axial direction of the shaft and which holds the substrate, and *a first pressure chamber formed between the flange portion and the chucking member, with the first pressure chamber being defined by the flange portion, the chucking member, and an elastic member linking the flange portion and the chucking member.* Further, claim 57 recites that a fluid is supplied to the first pressure chamber to pressurize the first pressure chamber, thereby bringing the substrate held by the chucking member into contact with the processing electrode.

Amended independent claim 60 recites a substrate holder for holding a substrate and bringing the substrate into contact with a processing electrode to carry out electrolytic processing of the substrate, comprising a flange portion connected to a shaft, a chucking member which can move with respect to the flange portion in an axial direction of the shaft and which holds the substrate, and *a weight of a predetermined weight attached to the chucking member to adjust a pressure applied to the processing electrode by the substrate.*

Nogami discloses an X-axis movement mechanism 41 having a wafer table 42 and a holder 45 for rotatably holding the wafer. However, Nogami does not disclose or suggest a first pressure chamber formed between the flange portion and the chucking member, with the first pressure chamber being defined by the flange portion, the chucking member, and an elastic member linking the flange portion and the chucking member, as required by independent claim 57, and therefore it is respectfully submitted that the invention of independent claim 57 is not anticipated by or rendered obvious by Nogami.

Further, Nogami does not disclose a weight of a predetermined weight attached to the chucking member to adjust a pressure applied to the processing electrode by the substrate, as required by independent claim 60, and therefore it is respectfully submitted that the invention of independent claim 60 is not anticipated by or rendered obvious by Nogami.

On page 3 of the Office Action, the Examiner rejected claims 9-15, 41-55, 57-64, 66 and 67 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the following: claims 1-43 of Mori et al. (U.S. 6,602,396) (hereinafter Mori '396) in view of Nogami; claims 1-11 of Mori et al. (U.S. 6,368,493) (hereinafter Mori '493) in view of Nogami; claims 1-42 of Mori et al. (U.S. 6,875,335) (hereinafter Mori '335) in view of Nogami; and claims 1-18 of Mori et al. (U.S. 6,743,349) (hereinafter Mori '349) in view of Nogami.

In this regard, it is first noted that claims 9-15, 41-55, 58, 59, 64, 66 and 67 have been cancelled. Accordingly, it is respectfully submitted that the Examiner's double patenting rejections of these claims are rendered moot.

In addition, for the reasons discussed below, it is respectfully submitted that claims 57 and 60-63 are clearly patentable over the prior art of record.

Amended independent claim 57 recites a substrate holder for holding a substrate and bringing the substrate into contact with a processing electrode to carry out electrolytic processing of the substrate, comprising a flange portion connected to a shaft, a chucking member which can move with respect to the flange portion in an axial direction of the shaft and which holds the substrate, and *a first pressure chamber formed between the flange portion and the chucking member, with the first pressure chamber being defined by the flange portion, the chucking member, and an elastic member linking the flange portion and the chucking member.* Further, claim 57 recites that a fluid is supplied to the first pressure chamber to pressurize the first pressure chamber, thereby bringing the substrate held by the chucking member into contact with the processing electrode.

With regard to Mori '396, Mori '493, Mori '335 and Mori '349, it is noted that none of the claims of Mori '396, Mori '493, Mori '335 and Mori '349 recite or suggest a substrate holder which includes *a first pressure chamber formed between the flange portion and the chucking member, with the first pressure chamber being defined by the flange portion, the chucking member, and an elastic member linking the flange portion and the chucking member,* as required by independent claim 57.

Further, as indicated above, Nogami does not disclose or suggest a first pressure chamber formed between the flange portion and the chucking member, with the first pressure chamber

being defined by the flange portion, the chucking member, and an elastic member linking the flange portion and the chucking member, as required by independent claim 57.

Therefore, as a substrate holder which includes a first pressure chamber formed between the flange portion and the chucking member, with the first pressure chamber being defined by the flange portion, the chucking member, and an elastic member linking the flange portion and the chucking member, as recited in independent claim 57, is neither disclosed by Nogami nor recited in any of the claims of Mori '396, Mori '493, Mori '335 and Mori '349, it is respectfully submitted that the invention of independent claim 57 is not disclosed or rendered obvious by any of the claims of Mori '396, Mori '493, Mori '335 and Mori '349, or by Nogami, taken either individually or in combination. Accordingly, it is respectfully submitted that the Examiner's double patenting rejection is not applicable to independent claim 57. Further, it is respectfully submitted that the double patenting rejections are not applicable to dependent claims 61-63, at least by virtue of their dependency from independent claim 57.

Amended independent claim 60 recites a substrate holder for holding a substrate and bringing the substrate into contact with a processing electrode to carry out electrolytic processing of the substrate, comprising a flange portion connected to a shaft, a chucking member which can move with respect to the flange portion in an axial direction of the shaft and which holds the substrate, and *a weight of a predetermined weight attached to the chucking member to adjust a pressure applied to the processing electrode by the substrate.*

With regard to the Mori references, it is noted that none of the claims of Mori '396, Mori '493, Mori '335 and Mori '349 recite or suggest a substrate holder which includes *a weight of a predetermined weight attached to the chucking member to adjust a pressure applied to the processing electrode by the substrate*, as required by independent claim 60.

Further, as indicated above, Nogami does not disclose or suggest a weight of a predetermined weight attached to the chucking member to adjust a pressure applied to the processing electrode by the substrate, as required by independent claim 60.

Therefore, as a substrate holder which includes a weight of a predetermined weight attached to the chucking member to adjust a pressure applied to the processing electrode by the substrate, as recited in independent claim 60, is neither disclosed by Nogami nor recited in any of the claims of Mori '396, Mori '493, Mori '335 and Mori '349, it is respectfully submitted that the invention of independent claim 60 is not disclosed or rendered obvious by any of the claims

of Mori '396, Mori '493, Mori '335 and Mori '349, or by Nogami, taken either individually or in combination. Accordingly, it is respectfully submitted that the Examiner's double patenting rejection is not applicable to independent claim 60.

On page 5 of the Office Action, the Examiner indicated that claims 23-34, 36, 38-39, 68-69 and 71 are allowed. In this regard, it is noted that the Examiner has not identified dependent claim 40 as being rejected or as being allowed. However, as claim 40 depends from allowed independent claim 33, it is respectfully submitted that claim 40 is also in condition for allowance.

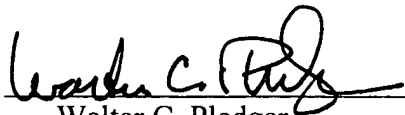
Therefore, it is respectfully submitted that independent claims 23, 25, 33, 57, 60 and 68, as well as claims 24, 26-32, 34, 36, 38-40, 61-63, 69 and 71, which depend therefrom, are clearly allowable over the prior art of record.

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice to that effect is respectfully solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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